## Titanium Mill Products, Ingot, and Castings



SEPTEMBER 1983

ITA991(83)-9 Issued November 1983

The statistics in this publication are based on a survey of manufacturers and represent total U.S. shipments of titanium mill products, ingot, and castings. Estimates are included for companies whose reports were not received in time for tabulation. A description of the survey methodology and related information appears in the January 1983 report for this series. ITA-991(83)-1, issued May 1983.

Table 1. NET SHIPMENTS OF TITANIUM MILL PRODUCTS



| (Thousands of pounds)                 |                |             |           |       |  |  |  |  |  |
|---------------------------------------|----------------|-------------|-----------|-------|--|--|--|--|--|
| Product                               | September 1983 | August 1983 | September | 1982  |  |  |  |  |  |
| Totel <sup>2</sup>                    | 3,087          | 2,437       |           | 2,994 |  |  |  |  |  |
| Sheet and strlp                       |                | (3)         | i         | (3)   |  |  |  |  |  |
| Plate<br>Porging and extrusion billet | ויי ע          | 1,141       |           | 1.329 |  |  |  |  |  |
| Rod and bar                           | 394            | 356         | _         | 359   |  |  |  |  |  |
| Pastener stock and wire               | 11 1           |             | 11        | 71    |  |  |  |  |  |
| Pipe sod tubing                       | 1,377          | 940         | K }       | 1,235 |  |  |  |  |  |
| Other                                 | νΙ             |             | IO.       |       |  |  |  |  |  |

 $\frac{1}{2}$ Onts are revised from the annual summary, 1TA-991(83)-1, issued Saptember 1983. Onte are revised from the annual numanty, 17x-97(E3)-1, issued Saptemeet 17s3-\*Set ahipments is the sum of all product enough ill product communed in the "Set and the set of the Joans for sheet and set[p, plate, extrusion (other than tubing), pipe and tubing, and other here been combined to avoid disclosing individual company data.

Table 2. TITANIUM INGOT, MILL PRODUCTS, AND CASTINGS: 1982 TO 1983

|   |  |  | (Thou   | sands of p                                      | ounds)  |  |   |  |   |                                   |
|---|--|--|---|---|---|--|---|--|---|-----------------------------------|
|   | Ingot  |  |   |   |   | Mill products  |   |  | Castings                                |                                   |
|   | Pro-<br>duction  | Con-<br>sumptloa   | Ship-<br>ments                                  | Receipts  | Ending<br>Inventories                                     | Pro-<br>duction  | Receipts  | Net ship-<br>ments1 2  | Pro-<br>duction                         | Ship-<br>ments                    |
| 1983  |  |  |   |   |   |  |   |  |   |                                   |
| SeptemberAugustJuly   | 5,096<br>4,361<br>4,148                                      | 5,386<br>4,814<br>3,608                                      | 1,061<br>805<br>867                             | 967<br>961<br>1,141                             | 5,647<br>5,920<br>5,994                                   | 3,591<br>2,845<br>2,577                                      | 735<br>432<br>314                               | 3,087<br>2,437<br>2,287                                      | 85<br>71<br>48                          | 35<br>32<br>25                    |
| June  | 5,048<br>3,769<br>3,657<br>4,310<br>3,698<br>3,544           | 5,168<br>3,665<br>3,446<br>4,354<br>3,560<br>3,698           | 945<br>1,002<br>918<br>1,151<br>977<br>621      | 924<br>968<br>746<br>1,181<br>839<br>892        | 5,052<br>5,221<br>5,141<br>5,017<br>5,020<br>4,938        | 3,132<br>3,021<br>2,567<br>2,887<br>2,418<br>2,651           | 355<br>422<br>198<br>191<br>224<br>168          | 2,642<br>2,691<br>2,479<br>2,876<br>2,633<br>2,665           | 84<br>81<br>94<br>100<br>104<br>83      | 41<br>47<br>42<br>55<br>61<br>34  |
| 1982  |  |  |   |   |   |  |   |  |   |                                   |
| Total <sup>3</sup> December. November October. September Auguat July. | 53,072<br>3,034<br>3,444<br>3,598<br>3,392<br>3,877<br>3,284 | 55,161<br>3,014<br>4,058<br>3,829<br>3,407<br>3,676<br>3,118 | 8,492<br>305<br>595<br>671<br>846<br>466<br>528 | 8,670<br>633<br>532<br>534<br>498<br>589<br>542 | (X)<br>5,068<br>4,707<br>5,386<br>5,579<br>5,884<br>5,634 | 37,221<br>2,366<br>2,347<br>2,357<br>2,877<br>2,339<br>2,433 | 4,789<br>164<br>177<br>307<br>379<br>162<br>144 | 36,562<br>2,869<br>2,501<br>2,359<br>2,994<br>2,342<br>2,382 | 797<br>74<br>72<br>52<br>36<br>60<br>61 | 521<br>37<br>40<br>43<br>36<br>35 |
| June. May April. March. February January.                             | 4,017<br>3,610<br>5,001<br>6,858<br>6,505<br>6,452           | 4,631<br>4,480<br>5,204<br>7,320<br>6,202<br>6,222           | 653<br>456<br>769<br>867<br>973<br>1,363        | 588<br>670<br>806<br>1,071<br>1,252<br>955      | 5,411<br>3,994<br>6,405<br>6,552<br>6,686<br>6,523        | 3,188<br>3,084<br>3,209<br>4,361<br>4,185<br>4,475           | 387<br>357<br>353<br>704<br>830<br>825          | 3,166<br>2,946<br>3,436<br>4,454<br>3,458<br>3,655           | 64<br>59<br>69<br>90<br>83<br>77        | 31<br>44<br>54<br>55<br>55        |

<sup>(</sup>X) Not applicable.

<sup>150</sup>e table 1 for more detailed data.

2Net shipments is the sum of mill product shipments plus mill products consumed in the manufacture of fabricated products, less total

receipts.

31nventories for the year are those shown for December.

PERMIT No. G-58

Official Business Penalty for Private Use, \$300

## Table 3. NET SHIPMENTS, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF TITANIUM HILL PRODUCTS: 1982 TO 1983

## (Quantity in thousands of pounds; value in thousands of dollars)

|   | Exports of domestic merchandise 2      |                         |                             | Percent<br>esports to             | Imports for consumption 4                          |                  |                           | Percent                                     |   |
|---|--|-------------------------|-----------------------------|-----------------------------------|--|------------------|---------------------------|---|---|
| Month and year  | turers' net<br>shipments<br>(quantity) | Quantity                | Value st<br>port            | Estimated<br>producers'<br>walue3 | manulac-<br>turers' net<br>shipments<br>(quantity) | Quantity         | Value <sup>5</sup>        | Apparent<br>consump-<br>tlos6<br>(quantity) | imports to<br>apparent<br>consumption<br>(quantity) |
| SEPTEMBER 1983  |  |                         |                             |                                   |  |                  |                           |   |   |
| Totsl<br>Titseium iegot sod forgiog and extrusion billet <sup>7</sup><br>Titseium mill products | 4,148<br>2,377<br>1,771                | 434<br>377<br>57        | 4,018<br>3,210<br>808       | 3,910<br>3,124<br>786             | 10<br>16<br>3                                      | 229<br>30<br>199 | 2,088<br>210<br>1,878     | 3,943<br>2,030<br>1,913                     | 6<br>1<br>10  |
| AUGUST 1983   |  |                         |                             |                                   |  |                  |                           |   |   |
| Total   | 3,242<br>1,946<br>1,296                | 349<br>293<br>56        | 3,898<br>2,803<br>1,095     | 3,794<br>2,728<br>1,066           | 11<br>15<br>4                                      | 181<br>9<br>172  | 1,632<br>62<br>1,570      | 3,074<br>1,662<br>1,412                     | 6<br>1<br>12  |
| JULY 1983   |  |                         |                             |                                   |  |                  |                           |   |   |
| Total<br>Titanium lugot and forging and extrusion billet <sup>7</sup><br>Titanium mill products | 3,154<br>1,859<br>1,295                | 274<br>148<br>125       | 3,732<br>2,125<br>1,607     | 3,632<br>2,068<br>1,564           | 9<br>8<br>10                                       | 169<br>12<br>157 | 1,262<br>93<br>1,169      | 3,049<br>1,723<br>1,326                     | 1 12  |
| JUNE 1983   |  |                         |                             |                                   |  |                  |                           |   |   |
| Total Titanium ingot and forging and extrusion billet <sup>7</sup> Titanium mill products       | 3,587<br>2,312<br>1,275                | 371<br>269<br>102       | 4,350<br>2,497<br>1,853     | 4,233<br>2,430<br>1,803           | 10<br>12<br>8                                      | 194<br>20<br>174 | 2,017<br>173<br>1,844     | 3,410<br>2,063<br>1,347                     | 13  |
| HAY 1983  | ĺ                                      |                         | 1                           |                                   |  |                  |                           |   |   |
| Total Titseium ingot and forging and extrusion billet <sup>7</sup> Titseium mill products       | 3,693<br>2,185<br>1,508                | 379<br>241<br>138       | 3,742<br>1,815<br>1,927     | 3,641<br>1,766<br>1,875           | 10<br>11<br>9                                      | 241<br>24<br>217 | 2,062<br>185<br>1,877     | 3,555<br>1,968<br>1,587                     | 1   |
| APRIL 1983  |  |                         |                             |                                   |  |                  |                           |   |   |
| Total   | 3,397<br>2,286<br>1,111                | 327<br>230<br>97        | 4,650<br>3,362<br>1,288     | 4,525<br>3,272<br>1,253           | 10<br>10<br>9                                      | 102<br>9<br>93   | 950<br>95<br>855          |   | (Z  |
| MARCH 1983  |  |                         |                             |                                   |  |                  |                           | ì   |   |
| Total Titanium ingot and forging and extrusion billet <sup>7</sup> Titanium mill products       | 4,027<br>2,623<br>1,404                | 385<br>229<br>156       | 5,312<br>3,024<br>2,288     | 5,169<br>2,943<br>2,226           | 10<br>9<br>11                                      | 169<br>7<br>162  | 1,581<br>88<br>1,493      | 2,401                                       | (z  |
| PEBRUART 1983   |  |                         |                             |                                   |  | ļ                |                           | 1   |   |
| Total Titanium ingot mod forging and extrusion billet <sup>7</sup> Titanium mill products       | 3,610<br>2,297<br>1,313                | 124<br>56<br>68         | 2,627<br>1,111<br>1,516     | 2,556<br>1,081<br>1,475           | 3<br>2<br>5  |                  | 1,467<br>234<br>1,233     | 2,266                                       | 1   |
| JANUARY 1983  |  |                         |                             |                                   |  | ,                |                           |   |   |
| Total Titanium ingot and forging and extrusion billet <sup>7</sup> Titanium mill products       | 3,324<br>1,964<br>1,360                | 282<br>212<br>70        | 2,497                       | 3,628<br>2,430<br>1,198           |  |                  | 1,107<br>85<br>1,022      | 1,758                                       | (Z  |
| 1982  |  |                         |                             |                                   |  |                  |                           |   |   |
| Total Titanium ingot and forging and extrusion billet7 Titanium mill products                   | 47,021<br>28,041<br>18,980             | 7,200<br>4,392<br>2,808 | 100,606<br>60,239<br>40,367 | 97,901<br>58,618<br>39,283        | 15<br>16<br>15                                     |                  | 22,269<br>3,976<br>18,293 | 24,075                                      |   |

<sup>(</sup>Z) Less than one-half of 1 percent.

<sup>1</sup> For a comparison of Standard Industrial Classification (SIC) codes, Schedule B export numbers, and TSUSA import numbers, see table 4 in the January report

To a compaction of Standard Industrial Classification (SIC) codes, Schedule B sport numbers, and TSUSA Laport numbers, see table 4 in the January reprized (1874) (1874) (1874). It is used May 1889 as a property of the Canas report BH 364, U.S. Exports.

\*\*Source: Bureau of the Canas report BH 364, U.S. Exports.

\*\*These values were derived by use of adjustment in the Catalogue religion. It is used to the port of export.

\*\*The values were derived by use of adjustment approximation of the producer's value of reparted goods. Current adjustment factors are based on data for 1991 which are published in Origin of Exports of Manufactured Products, MRI(AS)-5, appendis B. Comparable adjustment factors for earlier years are hased on statisfied factors developed for 1971 and 1972. The current adjustment factor for this report is 0.9731.

\*\*Source: Bureau of the Census report IN 165-X, U.S. imports for Consumption and Central Imports.

\*\*The value Includes c.i.i.\* (Const. insurance, and Fright) as the litts perior contry in the United States plus U.S. import duties and other charges to

one appure point.

Apparent consumption is derived by subtracting exports from the total of mat chipments plus imports.

Comparability of output, export, and import classifications for inpot and billet assume that bloom, wheet bar, and simb are reported as ingot or billet in the output manhers. Figures for import of ingor and billet also include powder, crystal, and similar forest which are excluded from the output and export